

## **Climate of Dubuque, Iowa (DBQ)**

The terrain around Dubuque varies from gently rolling 10 to 15 miles south and west to steep hills and bluffs around the city and along the Mississippi River.

The principal feature of the climate in Dubuque is its variety. The Dubuque area is subject to weather ranging from the cold, dry, arctic air masses in the winter with readings as low as -31 °F to the hot, dry weather of the desert southwest in the summer when temperatures reach as high as 110 °F. More often, the area is covered by mild Pacific air that has lost considerable moisture in crossing the mountains far to the west, or by cool, dry Canadian air, or by warm, moist air from the Gulf of Mexico. Most of the year the latter three types of air masses dominate Dubuque weather, with the invasions of Gulf air rarely occurring in the winter.

The seasons vary widely from year to year at Dubuque. For example, successive invasions of cold air from the north may bring a long, cold winter with snow-covered ground from mid-November until March and about 19 days of sub-zero temperatures. Another winter can be mild with bare ground most of the season and only a few sub-zero temperature readings. The summers, too, may vary from hot and humid with considerable thunderstorm activity when the Gulf air prevails, to relatively cool, dry weather when air of northerly origin dominates the season.

All seasons are marked by storms that accompany the changes from one type of air mass to another. In winter, rain changes to sleet and snow, and occasionally thunder is heard at the peak of a snowstorm. In summer, thunderstorms frequently produced heavy rain. They are occasionally accompanied by hail and on rare occasions by tornadoes and flash floods.

Most of the precipitation occurs during the spring and summer seasons. The last occurrence of snow and freezing rain can be in late May, and the first occurrence in late September.

While the climate of Dubuque does not lack for variety, there are times when a particular weather condition may persist for an extended period. Cold weather has lasted as long as 20 days in succession with sub-zero readings. Heat waves have persisted for 4 days or more with readings around 100 °F each day. Hot, dry spells occasionally plague the crops and livestock in the summer, but there are frequent periods of mild, dry weather in the spring and autumn.

Source: adapted from NCDC